Introduction

This case study explores how Telenet, one of the leading companies in cable television, internet and telephone services based in Belgium, effectively optimised its forecasting process with CCforecast.
“Telenet has the ambition to provide the best connectivity, entertainment and business solutions to its clients. Accessible on any device, at any time and from anywhere.”

To reach this ambition, Telenet was in search of methods to improve the forecast process. Methods that would make the whole process more accurate, intuitive, and faster and give management and other stakeholders easy and transparent access to forecast data-insights.
On top of improving the forecast process, also the forecast algorithms themselves needed an upgrade. Telenet’s reliance on accurate forecasting, that enables providing excellent customer service, dictated a forecasting tool with advanced A.I. algorithms that were able to achieve the high accuracy set forth by Telenet’s ambition.

Telecommunications | **Customer Service** | **3000 employees** | **Mail/Chat/Phone**

Customer Forecast Goals and Challenges

The Telenet Management team was looking for ways to improve customer service by having accurate forecasts across various channels, including phone, email, web-form and chat. Telenet found that relying on Excel was a very time-consuming process, and the data needed to produce a forecast was fragmented. Moreover, using Excel for forecasting relied heavily on intuition rather than statistical modelling, which was not ideal. The company also faced the risk of understaffing during high inflows of inquiries, resulting in poor customer experience due to long wait times.

Conversely, overstaffing due to lower-than-forecasted inflows could lead to a financial impact and increased operational costs. Therefore, the team prioritized finding a faster and less error-prone method for forecasting different scenarios, as opposed to using Excel. Correcting forecasts was also challenging, particularly when launching a new campaign that could affect customer responses. Additionally, the process of sending Excel files via email to external call centers was cumbersome and posed the risk of accidental changes.

“CCmath is committed and thinks along with us during each phase”

CCmath Approach

CCmath connected all fragmented data sources of the customer with CCforecast, reducing manual work and time spent in setting up the forecast. AML (Automated Machine Learning) on forecast components was used to optimise accuracy.

CCmath customised CCforecast to the company's specific needs and preferences, allowing for a comprehensive forecasting method that integrated all contact channels, departments and external partners. Furthermore, with CCforecast's advanced outlier management, the boring manual labour of removing outliers from historical data was eliminated. The scenario-building function allowed for quick and accurate predictions on strategic choices, resulting in total control of the forecasting cycle.

Results

With the implementation of CCforecast, the process has become fast and transparent, enabling forecasters to allocate more time and effort to talk to the business and tweak and model (marketing-driven) events. Intraday and intraweek forecasts have been automated, and this has significantly reduced the time spent on repetitive manual tasks.

CCforecast's workbench is now the preferred forecast reporting tool, allowing for an easy exchange of data, whilst building confidence in the outcome of the forecast process for management and other departments. With CCforecast, Telenet can now achieve the accuracy targets its sets for forecasting and predicting service levels with precision.

	Inbound Calls	Written	Social
Residential Inquires	85% within 120sec	48 hrs	80% within 1 hr
Small office/Home office inquires	80% within 60sec	24 hrs	100% within 2 hrs

*Achieved Telenet's Targets

"CCmath's LEA algorithm ensures accurate forecasts"

Customer Feedback

According to Telenet's forecaster, "Before CCforecast, we used large macros in MS Excel. After many years and changes, these could not be adjusted any more, and it was impossible to create intraday and intraweek patterns.

But since we have CCforecast, forecasting has become very intuitive and faster, data sharing is easy, and forecasts are now transparent for management and other departments. We never want to go back to Excel." The company now predicts the volumes of all its channels, and more queues are forecasted each day. CCforecast's LEA algorithm helps Telenet to get the forecast process and forecast accuracy that is needed.

Conclusion

CCforecast helped Telenet to optimise its forecasting process. Enabling Telenet with the capability to provide external call centers with forecasts up to 26 weeks in advance while following the 'informing to binding' contract cycle.
All forecasts are ultimately based on historical data and incorporate critical forecast components such as trends, level-changes, fade-out effects, ratios, external regressors (e.g. weather), seasonalities, (marketing-)events, and intraweek and intraday patterns. The CCforecast engine comprises a distinctive set of algorithms that utilise Automated Machine Learning to set the parameters for each of these components. This approach is known as the LEA model.

This is a significant improvement from using Excel. CCforecast is very intuitive, making forecasting more manageable, while data sharing is easy, and forecasts are now transparent for management and other departments. CCforecast is a highly accurate solution that simplifies and speeds up the forecasting process.

CCmath's scientific background and experience provided specialised and unlimited support, and the company's customer-centric culture allowed for a quick connection with the forecasters at Telenet and understanding of their needs.

In summary, Telenet never wants to go back to Excel, and with CCforecast, the company has achieved total control of the forecasting cycle.

"CCforecast is very intuitive, making forecasting more manageable"